

REMARKS

Reconsideration and allowance of the above identified patent application are hereby requested. Claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 are now in the application with claims 1, 53, 58, 59, 81, 91, and 103 being independent. Claims 53, 56, and 57 have been amended. No new matter has been added. The Examiner is thanked for withdrawing the objections to the drawings, the title, and the specification. The Examiner also is thanked for withdrawing the rejection under 35 U.S.C. §112, second paragraph. The Office's rejections are respectfully traversed.

Rejection Under 35 U.S.C. §101

Claims 81, 83-85, 87-90, and 103-105 stand rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter. The Office's contentions are respectfully traversed.

With respect to claim 81, the Office (Action of August 28, 2007 at page 3) asserts (emphasis added)...

As to claim 81, the claimed system includes various means for accomplishing various tasks, but the specification does not appear to show that any of the means is hardware. The means are therefore interpreted to be software per se, which is non-statutory.

Claims 83-85 and 87-90 are rejected based on claim 81.

Claim 81 recites "...means for monitoring time and location data corresponding to a mobile communications device...." The specification (para. [0022]) discloses (emphasis added)...

Time and location monitor 116 is an exemplary embodiment of a monitoring device 122. A monitoring device 122 may include, for example, a web-enabled device, or a wireless device, or a T1 or other hard-wired connection device, such as a television channel monitoring device, to record the activity on a television 124 in order to provide information on viewing habits, for example, or a telephone monitor to record telephonic activity, such as over a landline telephone 124, or an internet monitor to record internet viewing habits over a computer 124, or a purchasing monitor, such as a credit card machine 124, to track purchases at a particular store or stores by a particular user or users, or a monitor to track inter-relations between users, such as by telephone or over the internet.

Communications device, such as device 124, may provide data to the monitoring device 122 via a link, such as link 123, via, for example, a wireless or a hard-wired connection. Monitoring device 122 may provide data to the virtual database 104 via link 125, such as an internet link 125 through the network 106. A networked link, or a non-wired link, or a non-networked link, including an RF or optical link, may couple the monitor 122 to the virtual database 104.

Thus, the means for monitoring time and location data includes at least the time and location monitor 116, which is an exemplary embodiment of a monitoring device 122. Therefore, the means recited in claim 81 include hardware. Accordingly, withdrawal of the rejection of claims 81, 83-85, and 87-90 under 35 U.S.C. §101 is respectfully requested.

With respect to claim 103, the Office (Action of August 28, 2007 at page 3) asserts (emphasis added)...

As to claim 103, the claimed search engine does not appear to have any hardware components. Therefore, the search engine is interpreted to be software per se and non-statutory.

Claims 104 and 105 are rejected based on claim 103.

Claim 103 recites (emphasis added) "...a comparator communicatively connected to said first data bank...." The specification (para. [0029]) discloses (emphasis added)...

The controller may be a controller known to those skilled in the art, such as a DSP, comparator, bus controller, or the like, for example.

The specification (para. [0032]) further discloses (emphasis added)...

The controller 202 and/or the storage database 210 may include therewithin a simulator of human responses, such as a heuristic modeler 226. This heuristic modeler 226 may be programmed as software, and may have associated therewith a plurality of comparison information, or may include hardware, such as a comparator, in conjunction with the programming, or may reside in hardware only.

Thus, the specification discloses that the comparator is implemented in hardware. Therefore, the search engine recited in claim 103 includes a hardware component. Accordingly, withdrawal of the rejection of claims 103-105 under 35 U.S.C. §101 also is respectfully requested.

Rejection Under 35 U.S.C. §103

Claims 1, 2, 4, 6, 8-12, 14-17, 22-25, 27-28, 30-34, 41-53, 55-59, 61-64, 66-81, 83-85, 87-93, and 95-101 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,327,574 to Kramer et al. in view of U.S. Patent No. 6,363,419 to Martin Jr. et al. Claims 18-21 and 35-40 stand rejected under 35 U.S.C. §103(a) as allegedly being

unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 5,761,662 to Dasan. Claims 26 and 94 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 6,869,018 to Filfield et al. Claim 29 stands rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of Agrawal et al. ("On Integrating Catalogs"). Claims 103-105 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Kramer et al. in view of Martin Jr. et al., and further in view of U.S. Patent No. 5,855,015 to Shoham. The Office's contentions are respectfully traversed.

CLAIM 1

Claim 1 recites (emphasis added) "...at least one mobile communications device in communication with at least one network;...a virtual database accessible to the at least one mobile communications device over the at least one network, wherein said virtual database comprises: a user profile including at least one actual user characteristic received over the at least one network; a heuristic modeler that generates at least one heuristic user characteristic in accordance with the at least one actual user characteristic, wherein the heuristic user characteristic is stored in the user profile; and...."

The Office (Action of August 28, 2007 at page 4) asserts that Kramer et al. teach (emphasis added)....

a heuristic modeler (at least the mapping and sorting, fig. 8, #810, #816) that generates at least one heuristic user characteristic (at least the attribute vector,

cols. 21-32) in accordance with the at least one actual user characteristic, the heuristic user characteristic stored in the user profile (at least the software attribute vector mapping uses data from the facts in the database, fig. 8, col. 21, ll. 1-6);....

Kramer et al. fail to disclose the claimed subject matter.

Assuming *arguendo* that an attribute vector represents a heuristic user characteristic, as the Office (*Id.*) asserts, Kramer et al. nonetheless do not disclose a heuristic user characteristic that is stored in the user profile. Kramer et al. (Col. 21, lines 1-6) disclose (emphasis added)...

Each new fact entered into the database 804 is presented to the mapping subsystem 810, which uses knowledge obtained from a metadata server (FIG. 7) to update numeric fields of the attribute vector. The metadata is cached in the local database 804 and so is available to mapping subsystem 810.

Thus, Kramer et al. teach that an attribute vector is updated based on metadata cached in a local database. Updating an attribute vector and caching metadata, however, are not equivalent to storing a heuristic user characteristic in the user profile.

Further, the Office (Action of August 28, 2007 at page 4) asserts that the facts entered into the database 804 represent actual user characteristics included in the user profile. Kramer et al., however, teach that the attribute vector 808 and the database 804 represent separate data sources. For example, Kramer et al. (Col. 21, lines 51-58) disclose (emphasis added)...

The Illumination Sorter 816 then uses data from three data sources (the database 804 directly, the attribute vector 808, and the Boolean Abstractor 812) to do two things. First, it selects a set of illuminations that match either facts about the consumer in the database 804 or the consumer's attribute vector 808 well enough.

Second, the Illumination Sorter 816 sorts the selected illuminations in an order determined via a match score computed from the three data sources.

Thus, Kramer et al. teach that the attribute vector represents a data source that is distinct from the database, which the Office asserts contains actual user characteristics. Therefore, the attribute vector disclosed by Kramer et al. cannot be equivalent to a heuristic user characteristic that is stored in the user profile, as recited in claim 1.

For at least these reasons, claim 1 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 2, 4, 6, 8-12, and 14-52 depend from claim 1 and therefore are allowable for at least the reasons discussed with respect to claim 1.

CLAIM 6

Claim 6 recites (emphasis added) "The targeting system of claim 1, further comprising at least one monitor, wherein said at least one monitor monitors the at least one mobile communications device, wherein said monitor is communicatively connected to said virtual database, and wherein at least one actual user characteristic is varied in accordance with at least one output of said at least one monitor."

With respect to claim 6, the Office (Action of August 28, 2007 at pages 5-6) asserts that (emphasis added)...

...Kramer of claim 1 further teaches at least one monitor, wherein said at least one monitor monitors the mobile communications device (e.g., user transactions), wherein said monitor is communicatively coupled to said virtual database (see client and server side components starting from col. 12, l. 1), and wherein at least

one actual user characteristic is varied in accordance with at least one output of said at least one monitor (see “updating a consumer model”, col. 24, l. 36).

Thus, the Office asserts that Kramer et al. disclose a monitor that monitors the mobile communications device. With respect to claim 1, however, the Office (Action of August 28, 2007 at page 4) concedes that Kramer et al. (emphasis added) “...does not expressly teach a ‘mobile’ communications device, a monitor that detects time and location data associated with the device, wherein the detected time and location represent a current time and location of the device,....” Accordingly, Kramer et al. do not disclose, teach, or suggest a monitor that monitors the at least one mobile communications device, as recited in claim 6.

Further, Kramer et al. do not disclose that an actual user characteristic is varied in accordance with at least one output of said at least one monitor. For example, Kramer et al. (Col. 24, lines 36-39) disclose (emphasis added) “...updating the component elements of the attribute vector 808 in a consumer model.” Updating an attribute vector is not equivalent to varying an actual user characteristic. To the contrary, with respect to claim 1, the Office (Action of August 28, 2007 at page 4) asserts that actual user characteristics are represented by the facts disclosed at Col. 20, lines 65-66, and that a heuristic user characteristic is represented by an attribute vector. Accordingly, the portion of Kramer et al. cited by the Office does not disclose, teach, or suggest that an actual user characteristic is varied in accordance with at least one output of said at least one monitor, as recited in claim 6. Moreover, Martin Jr. et al. do not cure the deficiencies of Kramer et al.

For at least these reasons, claim 6 also is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. based on its own merits.

CLAIM 53

Amended claim 53 recites (emphasis added) "...a monitor that detects time and location data associated with the mobile communications device, wherein the detected time and location data represent a current time and a location of the mobile communications device; a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data...."

As discussed above with respect to claim 1, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, as recited in claim 53.

Further, the Office (Action of August 28, 2007 at page 16) concedes that Kramer et al. do not expressly teach a mobile communications device or a virtual database that includes one or more items of detected time and location data. Nonetheless, the Office (*Id.* at page 16) asserts that Martin Jr. et al. teach "...a mobile communications device, and a monitor that detects time and location representing the current time and location of the device." The Office (*Id.* at page 17) further asserts that (emphasis added)...

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kramer, such that the current time and location of

a mobile device would be monitored, detected and stored, and the system would additionally use the time and location to provide advertisements. The motivation would have been to provide better targeted advertising, as taught by Martin Jr. (col. 11, ll. 48-60).

However, neither Kramer et al. nor Martin Jr. et al. suggest storing in a virtual database one or more items of detected time and location data that are associated with a mobile communications device.

To the contrary, the Office concedes that Kramer et al. do not disclose detecting time and location data of a mobile communications device. Further, Martin Jr. et al. (Col. 11, lines 39-41) disclose using a mobile device's current geographic location information in combination with the current time to select idle content, but do not disclose, teach, or suggest storing such information in a virtual database. In fact, Martin Jr. et al. (Col. 11, lines 50-59) disclose updating the idle content of the mobile device when the location and/or time information associated with mobile device changes. Thus, the system of Martin Jr. et al. has no reason to store detected time and location data in a database. The Office appears to reach its conclusion by resorting to hindsight, which MPEP §2142 cautions is impermissible:

To reach a proper determination under 35 U.S.C. 103, the examiner must step backward in time and into the shoes worn by the hypothetical "person of ordinary skill in the art" when the invention was unknown and just before it was made.... The tendency to resort to "hindsight" based upon applicant's disclosure is often difficult to avoid due to the very nature of the examination process. However, impermissible hindsight must be avoided and the legal conclusion must be reached on the basis of the facts gleaned from the prior art.

The proposed combination of Kramer et al. and Martin Jr. et al. fails to suggest storing one or more items of detected time and location data associated with a mobile communications device. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest a virtual database comprising at least one user profile including an actual characteristic about said user and a heuristically determined characteristic about said user, wherein the virtual database also includes one or more items of detected time and location data, as recited in claim 53.

For at least these reasons, claim 53 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 55-57 depend from claim 53 and therefore are allowable for at least the reasons discussed with respect to claim 53.

Further, claim 58 includes subject matter similar to that of claim 53. For example, claim 58 recites (emphasis added) "...a monitor that detects time and location data corresponding to the wireless communication device, wherein the detected time and location data represent a current time and a current location of the wireless communication device; at least one first database comprising actual information entered by a user of the wireless device; at least one second database comprising monitored information of behavior by the user of the wireless device wherein the at least one second database includes one or more items of detected time and location data;..." Therefore, claim 58 is allowable for at least the reasons discussed with respect to claim 53.

Claim 59 also includes subject matter similar to that of claim 53. For example, claim 59 recites (emphasis added) "...monitoring time and location data corresponding to a mobile

communications device, wherein the time and location data indicate a current location of the mobile communications device; building a virtual database of information regarding the user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;....” Therefore, claim 59 is allowable for at least the reasons discussed with respect to claim 53. Claims 61-64 and 66-80 depend from claim 59 and therefore are allowable based at least on claim 59.

Additionally, claim 81 includes subject matter similar to that of claim 53. For example, claim 81 recites (emphasis added) “...means for monitoring time and location data corresponding to a mobile communications device, wherein the time and location data indicate a current location of the mobile communications device; means for accepting a virtual database of information regarding a mobile communications device user, wherein the virtual database includes one or more items of time and location data corresponding to the mobile communications device;....” Therefore, claim 81 is allowable for at least the reasons discussed with respect to claim 53. Claims 83-85 and 87-90 depend from claim 81 and therefore are allowable based at least on claim 81.

CLAIM 91

Claim 91 recites (emphasis added) “...at least one device interface to at least one mobile communications device; a searching interface; a storage database comprising at least one actual user characteristic of the at least one user, at least one heuristic user characteristic of the at least one user, and one or more items of time and location data corresponding to the at least one

mobile communications device; a controller communicatively connected to the at least one network interface, the at least one device interface, the searching interface, and the storage database; wherein said controller generates the at least one heuristic user characteristic in accordance with the at least one actual user characteristic and at least one item of time and location data, and wherein said controller generates a search for the searching interface in accordance with the at least one heuristic user characteristic, the at least one actual user characteristic, and at least one of the one or more items of time and location data.”

As discussed above with respect to claim 53, the proposed combination of Kramer et al. and Martin Jr. et al. fails to disclose, teach, or suggest a storage database comprising one or more items of time and location data corresponding to a mobile communications device. The Office (Action of August 28, 2007 at page 29) concedes that Kramer et al. does not expressly teach a mobile communications device. Thus, Kramer et al. cannot teach storing time and location data corresponding to a mobile communications device. Further, Martin Jr. et al. do not suggest storing one or more items of detected time and location data associated with a mobile communications device. Accordingly, the proposed combination of Kramer et al. and Martin Jr. et al. do not disclose, teach, or suggest a storage database comprising one or more items of time and location data corresponding to the at least one mobile communications device, as recited in claim 91.

Further, the proposed combination of Kramer et al. and Martin Jr. et al. does not disclose a controller that generates at least one heuristic user characteristic in accordance with the at least

one actual user characteristic and at least one item of time and location data corresponding to a mobile communications device.

In fact, the Office (Action of August 28, 2007 at pages 29-30) does not assert that Kramer et al. and/or Martin Jr. et al. disclose, teach, or suggest generating a heuristic user characteristic in accordance with an actual user characteristic and time and location data. Rather, the Office (*Id.*) concedes that Kramer et al. do not explicitly teach "...generating the user characteristic and searching according to the time and location data." Further, the Office (*Id.*) asserts that (emphasis added)...

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kramer, such that the current time and location of a mobile device would be monitored, detected and stored, and the system would additionally use the time and location to provide advertisements. The motivation would have been to provide better targeted advertising, as taught by Martin Jr. (col. 11, ll. 48-60). Thus, the claimed subject matter would be implemented.

However, providing advertisements is not equivalent to generating a heuristic user characteristic in accordance with an actual user characteristic and time and location data. MPEP §2143 requires that the proposed combination of cited references teach or suggest all the claimed subject matter in order to establish a *prima facie* case of obviousness. The Office has failed to identify how the cited prior art references disclose all of the elements recited in claim 91.

For at least these reasons, claim 91 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. Claims 92-101 depend from claim 91 and therefore are allowable for at least the reasons discussed with respect to claim 91.

CLAIM 103

Claim 103 recites (emphasis added) "...a first data bank of user characteristics, wherein said first data bank includes at least one user characteristic entered by the user and at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device;...."

The Office (Action of August 28, 2007 at page 39) concedes that Kramer et al. do not expressly disclose a wireless communication device. However, the Office (*Id.*) asserts that (emphasis added)...

Martin Jr. teaches a wireless communications device, and a monitor that detects time and location representing the current time and location of the device. Time and location is used to provide even better targeted advertising (col. 11, ll. 48-60). Kramer discloses targeted advertising using a virtual database about the user, and providing advertisements to the user (see above.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kramer, such that the current time and location of a mobile device would be monitored, detected and stored, and the system would additionally use the time and location to provide advertisements.

However, using time and location data to provide advertisements is not equivalent to determining a user characteristic in accordance with a time and location monitor. Therefore, the Office fails to assert that Kramer et al. and/or Martin Jr. et al. disclose, teach, or suggest a first data bank that includes at least one user characteristic determined in accordance with a time and location monitor that monitors a current location of the wireless communications device, as recited in claim 103. MPEP §2143 requires that the proposed combination of cited references teach or

suggest all the claimed subject matter in order to establish a prima facie case of obviousness. The Office has failed to identify how the cited prior art references disclose all of the elements recited in claim 103.

Because Kramer et al. do not disclose a wireless communication device, Kramer et al. cannot disclose a user characteristic determined in accordance with a time and location monitor that monitors a current location of a wireless communications device. Further, Martin Jr. et al. do not disclose determining a user characteristic and thus also cannot disclose a user characteristic determined in accordance with a time and location monitor.

Additionally, Shoham also does not disclose determining a user characteristic in accordance with a time and location monitor. Rather, Shoham (Abstract) discloses refining future search, retrieval, and presentation of information based on relevance feedback from the user. Refining information search and retrieval based on relevance feedback is not equivalent to determining a user characteristic in accordance with a time and location monitor that monitors a current location of the wireless communications device. Therefore, the proposed combination of Kramer et al., Martin et al., and Shoham fails to disclose, teach, or suggest the subject matter recited in claim 103.

For at least these reasons, claim 103 is allowable over the proposed combination of Kramer et al. and Martin Jr. et al. in view of Shoham. Claims 104 and 105 depend from claim 103 and therefore are allowable for at least the reasons discussed with respect to claim 103.

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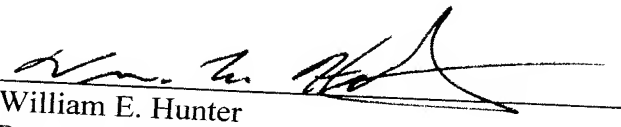
Concluding Comments

The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly contested. Accordingly, the above arguments for patentability of a claim should not be construed as implying that there are not other valid reasons for patentability of that claim or other claims.

In view of the above remarks, claims 1, 2, 4, 6, 8-12, 14-53, 55-59, 61-64, 66-81, 83-85, 87-101, and 103-105 should be in condition for allowance, and a formal notice of allowance is respectfully requested. Please apply a \$120 charge for the Petition for Extension of Time fee and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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